# **TDI** Texas Department of Insurance

PO Box 12030 | Austin, TX 78711 | 800-578-4677 | tdi.texas.gov

# **Product Evaluation**

SK50 | 0222

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: SK-50

Effective Date:February 1, 2022Re-evaluation Date:February 2026

Product Name: Series SI 5600 Aluminum Frame Pyramid Skylight, Impact Resistant

Manufacturer: Solar Innovations, Inc. 31 Roberts Road Pine Grove, PA 17963 (570) 915-1500

# **General Description:**

System	Description	Label Rating	Design Pressure Rating
1	Series SI 5600 Pyramid Skylight; 99-1/4" x 147-3/4" (Impact Resistant); O	ASTM E 330-10 ASTM E 1886-04/05 ASTM E 1996-02/04/09/12a Missile Level D MST: 99 x 148	+65 / -65 psf

**Compliance:** The skylight assemblies passed test criteria equivalent to ASTM E 330-14, ASTM E 1896-13a, and ASTM E 1996-14a.

# **Product Dimensions:**

System	Overall Frame Size	Maximum Daylight Opening Size
1	99-1/4" x 147-3/4"	46" x 46"

# **Product Identification (Certification Agency Label on the Skylight):**

System			
	Certification Agency	NAMI	
	Manufacturer's Name or Code Name	Solar Innovations, Inc.	
1	Product Name	SI 5600 Impact Rated Pyramid Skylight Window	
	Test Standards	ASTM E 330-10; ASTM E 1886-04/05 ASTM E 1996-02/04/09/12a Missile Level D	

#### **Impact Resistance:**

System	Impact Resistant	Requirement
1	Yes	These products satisfy TDI's criteria for protection from windborne debris. Install the assemblies at a height on the structure that does not exceed the design pressure rating for the assemblies. In essential facilities, the skylights may be installed at heights above 30 ft in Wind Zone 3 and below 30 ft in Wind Zone 2.

# Installation:

**General:** The assembly must be installed in accordance with the manufacturer's installation instructions and this product evaluation. Detailed drawings and installation instructions are available from the manufacturer.

# **Design Drawings:**

The skylight assemblies must comply with and be installed in accordance with the following design drawing:

Drawing No. 08-02658; "Series SI 5600 Pyramid Skylight Impact;" Sheets 1 thru 13; dated March 24, 2015; revision a dated November 16, 2021; signed and sealed by Luis R. Lomas, P.E on November 16, 2021. This evaluation report refers to the stated drawings as the approved drawings.

**Fabrication and Assembly:** Solar Innovations, Inc. pyramid skylight windows are fabricated in the factory. The pyramid skylight windows are assembled and glazed at the jobsite. The approved drawings referenced in this evaluation report indicate the options for the glazing construction.

**Wall Framing Construction**: The skylight may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- Concrete (minimum compressive strength: 3,192 psi)
- Wood dimension lumber (minimum Spruce-Pine-Fir,  $G \ge 0.42$ )
- Masonry (ASTM C-90, Grade N, Type 1 or greater)
- Steel (18 gauge, 33 ksi)
- Aluminum (6063-T5, 1/8" thick minimum)

# Installation:

- Skylights are installed in accordance with the approved drawings.
- The approved drawings indicate the minimum embedment depths for the fasteners and the minimum edge distances (minimum distance fastener must be from the edge of the substrate material) for the fasteners.
- **Note:** Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.